QC ABSTRACT

NAME OF WORK: Package-3, Includes 4 Works 1) Improvements to CA Sites Providing Chain Link Fencing in Coffee Board Layout and Surrounding Areas in Ward No.07, Byatarayanapura, 2) Improvements to CA Sites Providing Chain Link Fencing in Jakkur, Jakkur Layout and Surrounding Areas in Ward No.07, 3) Byatarayanapura. Improvements to Roads and Footpaths Vinayaka Layout 1st Stage, Vinayaka Layout 2nd Stage and Amruthanagara in Ward No.07, Byatarayanapura, 4) Construction and Improvements of Toilets in Sahakaranagar,Byatarayanapura Surrounding Areas in Ward No.07, Byatarayanapura.

SL NO	Item Of Work	Name of Test	Frequency of Test/Quantity	Executed Quantity	Number of Tests Required	Number of Tests Conducted
		Materials				
1	Cement	Fineness by dry sieving	One Test		1	1
		Finess by Air permeablity method	One Test		1	1
		Density	One Test		1	1
		Standard Consistency	One Test		1	1
		Initial Setting time	One Test		1	1
		Final Setting time	One Test		1	1
		Soundness (Le Chatelier's Method)	One Test		1	1
		Compressive Strength	One Test		1	1
2	Coarse aggregate(40 mm down size)	SIEVE ANALYSIS	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		Specific Gravity	One Test		1	1
		Bulk Density(Loose)	One Test		1	1
		Bulk Density(Compacted)	One Test		1	1
		Water Absorption	One Test		1	1
3	Coarse aggregate(20 mm down size)	SIEVE ANALYSIS	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		Specific Gravity	One Test		1	1
		Bulk Density(Loose)	One Test		1	1
		Bulk Density(Compacted)	One Test		1	1
		Water Absorption	One Test		1	1
		Aggregate crushing Value	One Test		1	1
		Aggregate Impact Value	One Test		1	1
4	Fine aggregate	SIEVE ANALYSIS	One Test		1	1
		Water Absorption	One Test		1	1
		Specific Gravity	One Test		1	1
		Material finer than 75 micron	One Test		1	1
5	Steel	Bend test	One Test		1	1
		Tensile Test	One Test		1	1
		Yield Test	One Test		1	1
		ReBend test	One Test		1	1
6	Block(400*150*200)	BLOCK DENSITY	One Test		1	1
		WATER ABSORPTION	One Test		1	1
		DIMENSION ANALYSIS	One Test		1	1
		COMPRESSIVE STRENGTH	One Test		1	1
7	PCC(M15)	Compressive Strength(7days and 28days)	1 set /1-5 cum	4.04	2	2
8	RMC(M20)	Compressive Strength(7days and 28days)	3 set /16-30 cum	19.97	6	6

Assistant Executive Engineer
Yelahanka Sub Division
BBMP, Bangalore

10	CERAMIC TILES	MEASUREMENTS OF LENGTH, WIDTH AND THICKNESS	One Test		1	1
		MODULUS OF RUPTURE AND BREAKING STRENGTH	One Test		1	1
11	Mortar Sand	Water Absorption	One Test		1	1
		Specific Gravity	One Test		1	1
		Material finer than 75 micron	One Test		1	1
		Compacted Bulk Density	One Test		1	1
		Loose Bulk Density	One Test		1	1
		SIEVE ANALYSIS	One Test		1	1
12	Plaster Sand	Water Absorption	One Test		1	1
		Specific Gravity	One Test		1	1
		Material finer than 75 micron	One Test		1	1
		SIEVE ANALYSIS	One Test		1	1

AE(Ag)

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Format No: CP/TF/01

TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID	:	**CP-2021-01-28-81** **Date: 04-09-20**
Customer	:	Assistant Executive Engineer, Kodigehalli Sub Division, BBMP, Bangalore.
Address	:	Kodigehalli Sub Division, BBMP, Bangalore.
Project Name	:	Package-3, Includes 4 Works. 1) Improvements to CA Sites Providing Chain Link Fencing in Coffee Board Layout and Surrounding Areas in Ward No.07, Byatarayanapura, 2) Improvements to CA Sites Providing Chain Link Fencing in Jakkur, Jakkur Layout and Surrounding Areas in Ward No.07, 3) Byatarayanapura. Improvements to Roads and Footpaths Vinayaka Layout 1st Stage, Vinayaka Layout 2nd Stage and Amruthanagara in Ward No.07, Byatarayanapura, 4) Construction and Improvements of Toilets in Sahakaranagar,Byatarayanapura Surrounding Areas in Ward No.07, Byatarayanapura.
Agency	:	Sri.B.B. Umesh, No.385/1, Near Anjeneya Temple, Bettahalasuru (P), Bangalore North-562157.
Customer's Reference	:	BBMP/EE/BTP/WO/72/2018-19
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	01-09-20
Sample Type	:	Birla Super 53grade
Reference to BIS codes	:	IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification , IS 4031 (Part 1,2 3,4,5, 6,11):1988 IS 4031 Part 1 DETERMINATION OF FINENESS BY DRY SIEVING, Clause 4.4 IS 4031 Part 2, Determination of Fineness by Blaine Air Permeability Method, Clause 5 IS 4031 Part 3, Determination of Soundness, Clause 5,Clause 6 IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5 IS 4031 Part 5, Determination of Initial & Final Setting Time, Clause 5 IS 4031 Part 11,DETERMINATION OF DENSITY , Clause 6
Date of test	:	02-09-20
Environmental Conditions during test	:	Temperature: 26°C Humidity: 72%

Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	Fineness by dry sieving (%)	1.85	_
2	Finess by Air permeablity method (m^2/kg,Min)	348.6	225m^2/kg, Min
3	Density (gm/cc)	3.15	_
4	Standard Consistency (%)	28.5%	Not specified
5	Initial Setting time	135 minutes	Not less than 30 minutes
6	Final Setting time	245 minutes	Not more than 600 minutes
7	Soundness (Le Chatelier's Method)	1.5mm	Not more than 10 mm

* The results obtained are satisfactory as per standard requirements.

Note:

The results pertain to the samples received and tested.

All information furnished by Customer/Representative

Any correction in the report will make this report invalid

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Samples will be disposed after 30 days from the date of issue of test certificate

AE(KOT)

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

CIVIL Pro Sig..... Date..... BANGALORE

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R RUDRAPRASAD
Authorized Signatory
Technical Manager

****End of Report****

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TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID	:	**CP-2021-01-28-81** **Date: 30-09-20**
Customer	:	Assistant Executive Engineer, Kodigehalli Sub Division, BBMP, Bangalore.
Address	:	Kodigehalli Sub Division, BBMP, Bangalore.
Project Name	:	Package-3, Includes 4 Works. 1) Improvements to CA Sites Providing Chain Link Fencing in Coffee Board Layout and Surrounding Areas in Ward No.07, Byatarayanapura, 2) Improvements to CA Sites Providing Chain Link Fencing in Jakkur, Jakkur Layout and Surrounding Areas in Ward No.07, 3) Byatarayanapura. Improvements to Roads and Footpaths Vinayaka Layout 1st Stage, Vinayaka Layout 2nd Stage and Amruthanagara in Ward No.07, Byatarayanapura, 4) Construction and Improvements of Toilets in Sahakaranagar,Byatarayanapura Surrounding Areas in Ward No.07, Byatarayanapura.
Agency	:	Sri.B.B. Umesh, No.385/1, Near Anjeneya Temple, Bettahalasuru (P), Bangalore North-562157.
Customer's Reference	:	BBMP/EE/BTP/WO/72/2018-19
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	01-09-20
Sample Type	:	Birla Super 53grade
Reference to BIS codes	:	IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification , IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5 IS 4031 Part 6, Determination of Compressive Strength, Clause 6
Date of test	:	02-09-20
Environmental Conditions during test	:	Temperature: 26°C Humidity: 72%

Compressive Strength			
Sl.No.	**Physical properties**	**Results**	**Requirement as per IS 12269: 2013**
1	3 Days	28.5N/mm^2	Not less than 27 N/mm^2
2	7 Days	39.0N/mm^2	Not less than 37 N/mm^2
3	28 Days	58.5N/mm^2	Not less than 53 N/mm^2

• The results obtained are satisfactory as per standard requirements.

Note:
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Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

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TEST REPORT ON COARSE AGGREGATES

Lab ID	:	**CP-2021-01-28-81** **Date: 04-09-20**
Customer	:	Assistant Executive Engineer, Kodigehalli Sub Division, BBMP, Bangalore.
Address	:	Kodigehalli Sub Division, BBMP, Bangalore.
Project Name	:	Package-3, Includes 4 Works. 1) Improvements to CA Sites Providing Chain Link Fencing in Coffee Board Layout and Surrounding Areas in Ward No.07, Byatarayanapura, 2) Improvements to CA Sites Providing Chain Link Fencing in Jakkur, Jakkur Layout and Surrounding Areas in Ward No.07, 3) Byatarayanapura. Improvements to Roads and Footpaths Vinayaka Layout 1st Stage, Vinayaka Layout 2nd Stage and Amruthanagara in Ward No.07, Byatarayanapura, 4) Construction and Improvements of Toilets in Sahakaranagar,Byatarayanapura Surrounding Areas in Ward No.07, Byatarayanapura.
Agency	:	Sri.B.B. Umesh, No.385/1, Near Anjeneya Temple, Bettahalasuru (P), Bangalore North-562157.
Customer's Reference	:	BBMP/EE/BTP/WO/72/2018-19
Source of Sample	:	Sample supplied by Agency
Sample condition	:	Satisfactory
Date of Receipt	:	01-09-20
Sample Type	:	40mm down size coarse aggregate
Reference to BIS codes	:	IS: 383:2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1,3,4) RA2011 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption IS 2386 Part 4: Mechanical Properties
Date of test	:	01-09-20

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 40MM DOWN COARSE AGGREGATE:

Total weight taken : 15000 grams

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	80 mm	0	0	0.0	100	100
2	40 mm	217	217	1.4	98.6	90-100
3	20 mm	7453	7670	51.1	48.9	30-70
4	10 mm	4266	11936	79.6	20.4	10-35
5	4.75 mm	2844	14780	98.5	1.5	0-5
6	Pan	220	15000	100.0	0	---

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TEST REPORT ON COARSE AGGREGATES

Lab ID	:	**CP-2021-01-28-81** **Date: 03-09-20**
Customer	:	Assistant Executive Engineer, Kodigehalli Sub Division, BBMP, Bangalore.
Address	:	Kodigehalli Sub Division, BBMP, Bangalore.
Project Name	:	Package-3, Includes 4 Works. 1) Improvements to CA Sites Providing Chain Link Fencing in Coffee Board Layout and Surrounding Areas in Ward No.07, Byatarayanapura, 2) Improvements to CA Sites Providing Chain Link Fencing in Jakkur, Jakkur Layout and Surrounding Areas in Ward No.07, 3) Byatarayanapura. Improvements to Roads and Footpaths Vinayaka Layout 1st Stage, Vinayaka Layout 2nd Stage and Amruthanagara in Ward No.07, Byatarayanapura, 4) Construction and Improvements of Toilets in Sahakaranagar,Byatarayanapura Surrounding Areas in Ward No.07, Byatarayanapura.
Agency	:	Sri.B.B. Umesh, No.385/1, Near Anjeneya Temple, Bettahalasuru (P), Bangalore North-562157.
Customer Reference	:	BBMP/EE/BTP/WO/72/2018-19
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	01-09-20
Sample Type/ Size	:	20mm down size coarse aggregate
Reference to BIS codes	:	IS: 383:2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1,3,4) RA2011 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption IS 2386 Part 4: Mechanical Properties
Date of test	:	01-09-20

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 20MM DOWN COARSE AGGREGATE:

Total weight taken : 5000 grams

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	40 mm	0	0	0	100	100
2	20 mm	225	225	4.5	95.5	90-100
3	10 mm	2845	3070	61.4	38.6	25-55
4	4.75 mm	1745	4815	96.3	3.7	0-10
5	Pan	185	5000	100	0	_

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Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID : **CP-2021-01-28-81** **Date: 03-09-20**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS:383-2016
1	Flakiness Index(%)	13.2	Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate
2	Elongation Index(%)	10.1	
3	Specific Gravity	2.68	–
4	Bulk Density(Loose) (Kg/l)	1.43	–
5	Bulk Density(Compacted) (Kg/l)	1.49	–
6	Water Absorption(%)	0.23	–
7	Aggregate crushing Value(%)	22.9	Max 30% for Aggregates to be used in concrete for wearing Surface, In case Aggregate Crushing Value Exceeds 30% then the test for ten percent fines should be conducted for Aggregates to be used in concrete other than for wearing Surface.
8	Aggregate Impact Value(%)	23.7	30% for Aggregates to be used in concrete for wearing Surface, 45% for Aggregates to be used in concrete other than for wearing Surface.

* The results obtained are satisfactory as per standard requirements.

Note:

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Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

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Technical Manager

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TEST REPORT OF FINE AGGREGATE

Lab ID	:	**CP-2021-01-28-81** **Date: 03-09-20**
Customer	:	Assistant Executive Engineer, Kodigehalli Sub Division, BBMP, Bangalore.
Address	:	Kodigehalli Sub Division, BBMP, Bangalore.
Project Name	:	Package-3, Includes 4 Works. 1) Improvements to CA Sites Providing Chain Link Fencing in Coffee Board Layout and Surrounding Areas in Ward No.07, Byatarayanapura, 2) Improvements to CA Sites Providing Chain Link Fencing in Jakkur, Jakkur Layout and Surrounding Areas in Ward No.07, 3) Byatarayanapura. Improvements to Roads and Footpaths Vinayaka Layout 1st Stage, Vinayaka Layout 2nd Stage and Amruthanagara in Ward No.07, Byatarayanapura, 4) Construction and Improvements of Toilets in Sahakaranagar,Byatarayanapura Surrounding Areas in Ward No.07, Byatarayanapura.
Agency	:	Sri.B.B. Umesh, No.385/1, Near Anjeneya Temple, Bettahalasuru (P), Bangalore North-562157.
Customer's Reference	:	BBMP/EE/BTP/WO/72/2018-19
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	01-09-20
Sample Type	:	Fine Aggregate
Reference to BIS codes	:	IS 383 : 2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1, 3) RA2012 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption
Date of test	:	01-09-20
Total weight taken	:	1000 grams

Sl.no	Sieve Size	Weight Retained (gms)	Cumulative Weight Retained (gms)	% Cumulative Weight Retained	% Passing	Requirement as per IS 383:2016			
						Grading Zone I	Grading Zone II	Grading Zone III	Grading Zone IV
1	10 mm	0	0	0.0	100.0	100	100	100	100
2	4.75 mm	27	27	2.7	97.3	90-100	90-100	90-100	95-100
3	2.36 mm	55	82	8.2	91.8	60-95	75-100	85-100	95-100
4	1.18 mm	239	321	32.1	67.9	30-70	55-90	75-100	90-100
5	600 micron	205	526	52.6	47.4	15-34	35-59	60-79	80-100
6	300 micron	203	729	72.9	27.1	5-20	8-30	12-40	15-50
7	150 micron	191	920	92.0	8.0	0-10	0-10	0-10	0-15
8	Pan	80	1000	100.0	0.0	---	---	---	---

Result :The tested Sample Conforms to Grading Zone II

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TEST REPORT OF FINE AGGREGATE

Lab ID : **CP-2021-01-28-81** **Date: 03-09-20**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS 383:2016
1	Water Absorption(%)	1.53	–
2	Specific Gravity	2.59	–
3	Material finer than 75 micron(%)	6.4	Uncrushed fine Aggregate Max 3%, Crushed Fine aggregate Max 15%, Mixed Fine aggregate Max 12%, Manufactured Fine aggregate Max 10%

* The results obtained are satisfactory as per standard requirements.

Note:

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AE(WT) N.D

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

CIVIL Pro Sig..... Date..... BANGALORE

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Authorized Signatory
Technical Manager

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Format No: CP/TF/01

TEST REPORT ON PHYSICAL REQUIREMENTS OF SOLID CONCRETE BLOCKS

Lab ID	:	**CP-2021-01-28-81** **Date: 19-09-20**
Customer	:	Assistant Executive Engineer, Kodigehalli Sub Division, BBMP, Bangalore.
Address	:	Kodigehalli Sub Division, BBMP, Bangalore.
Project Name	:	Package-3, Includes 4 Works. 1) Improvements to CA Sites Providing Chain Link Fencing in Coffee Board Layout and Surrounding Areas in Ward No.07, Byatarayanapura, 2) Improvements to CA Sites Providing Chain Link Fencing in Jakkur, Jakkur Layout and Surrounding Areas in Ward No.07, 3) Byatarayanapura. Improvements to Roads and Footpaths Vinayaka Layout 1st Stage, Vinayaka Layout 2nd Stage and Amruthanagara in Ward No.07, Byatarayanapura, 4) Construction and Improvements of Toilets in Sahakaranagar,Byatarayanapura Surrounding Areas in Ward No.07, Byatarayanapura.
Agency	:	Sri.B.B. Umesh, No.385/1, Near Anjeneya Temple, Bettahalasuru (P), Bangalore North-562157.
Customer's Reference	:	BBMP/EE/BTP/WO/72/2018-19
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	16-09-20
Sample Type/Size	:	Solid concrete blocks size (400X150X200)mm
Reference to BIS codes	:	IS : 2185 (Part 1) : 2005(RA 2010) Concrete Masonry Specification Part 1:Hollow and Solid Concrete Blocks (Dimensions -Annex-B, Clause 9.2 and 10 , Block density Annex -C Clause 9.3 and10, Compressive strength Annex -D Clause 9.4 and 10, Water absorption Annex -E Clause 9.5 and 10)
Date of test	:	16-09-20

BLOCK DENSITY:

Sl. No.	Measurement of overall Dimensions of Individual Blocks			Overall Volume of the Block in Cubic Centimetres	Weight of Oven Dried Block in Kilograms to the nearest 10 Gram	Block Density in Kg/cum*10^6	Avg.Block Density in (Kg/cum)	As per IS 2185(Part 1) :2005 (RA 2010)
	Length	Breadth	Height					
	mm	mm	mm	(Cm^3)	Kg	Kg/m^3	Kg/m^3	
1	398	149	200	11860	33.204	2799.5	2724.2	Not less than 1800Kg/m^3
2	398	149	198	11742	32.742	2788.5		
3	398	152	200	12099	31.272	2584.6		

WATER ABSORPTION:

Sl. No.	Wet weight after water absorption	Dry weight (Oven dry)	Water Absorption	Avg.Water Absorption	As per IS 2185(Part 1):2005 (RA 2010)
	kg	kg	%	%	
1	33.91	32.25	4.89	4.25	Shall not be more than 10% by mass
2	33.57	32.14	4.28		
3	33.44	32.24	3.59		

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

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Lab ID : **CP-2021-01-28-81**

Date: 19-09-20

DIMENSION ANALYSIS

Sl.no	Length mm	Breadth mm	Height mm	Requirement as per IS 2185(Part 1):2005
1	401	150	203	
2	399	150	200	
3	399	152	202	
4	400	149	199	
5	400	151	201	
6	399	149	199	
7	400	151	200	
8	400	152	200	
9	403	152	203	
10	401	150	203	
11	401	151	200	
12	402	151	200	
13	400	151	201	
14	402	150	202	
15	401	151	199	
16	400	150	202	
17	404	152	201	
18	401	149	202	
19	401	153	200	
20	400	151	203	
Average of 20	**401**	**151**	**201**	

Length : ± 5mm
Breadth : ± 3mm
Height : ± 3mm

Assistant Executive Engineer
Kodigehalli Sub Division
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Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : **CP-2021-01-28-81** **Date: 15/09/2020**

Customer : Assistant Executive Engineer, Kodigehalli Sub Division, BBMP, Bangalore.

Address : Kodigehalli Sub Division, BBMP, Bangalore.

Project Name : Package-3, Includes 4 Works. 1) Improvements to CA Sites Providing Chain Link Fencing in Coffee Board Layout and Surrounding Areas in Ward No.07, Byatarayanapura, 2) Improvements to CA Sites Providing Chain Link Fencing in Jakkur, Jakkur Layout and Surrounding Areas in Ward No.07, 3) Byatarayanapura. Improvements to Roads and Footpaths Vinayaka Layout 1st Stage, Vinayaka Layout 2nd Stage and Amruthanagara in Ward No.07, Byatarayanapura, 4) Construction and Improvements of Toilets in Sahakaranagar,Byatarayanapura Surrounding Areas in Ward No.07, Byatarayanapura.

Agency : Sri.B.B. Umesh, No.385/1, Near Anjeneya Temple, Bettahalasuru (P), Bangalore North-562157.

Customer's Reference : BBMP/EE/BTP/WO/72/2018-19

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 10-09-20

Customer ID : Footing Concrete

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M20 / 7 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

Date of test : 15/09/2020

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	Footing Concrete	M20	08/09/2020	15/09/2020	150.47 X 149.26 X 150.70	22460	**8.032**	422.6	18.8	18.5
2	Footing Concrete	M20	08/09/2020	15/09/2020	150.19 X 151.17 X 149.74	22704	**8.429**	418.8	18.4	
3	Footing Concrete	M20	08/09/2020	15/09/2020	149.13 X 150.50 X 151.96	22444	**8.955**	406.3	18.1	

* The results obtained are satisfactory as per standard requirements.

Note:

The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid
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Samples will be disposed after 30 days from the date of issue of test certificate

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R RUDRAPRASAD
Authorized Signatory
Technical Manager

****End of Report****

: 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL |
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4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : **CP-2021-01-28-81** **Date: 06/10/2020**

Customer : Assistant Executive Engineer, Kodigehalli Sub Division, BBMP, Bangalore.

Address : Kodigehalli Sub Division, BBMP, Bangalore.

Project Name : Package-3, Includes 4 Works. 1) Improvements to CA Sites Providing Chain Link Fencing in Coffee Board Layout and Surrounding Areas in Ward No.07, Byatarayanapura, 2) Improvements to CA Sites Providing Chain Link Fencing in Jakkur, Jakkur Layout and Surrounding Areas in Ward No.07, 3) Byatarayanapura. Improvements to Roads and Footpaths Vinayaka Layout 1st Stage, Vinayaka Layout 2nd Stage and Amruthanagara in Ward No.07, Byatarayanapura, 4) Construction and Improvements of Toilets in Sahakaranagar,Byatarayanapura Surrounding Areas in Ward No.07, Byatarayanapura.

Agency : Sri.B.B. Umesh, No.385/1, Near Anjeneya Temple, Bettahalasuru (P), Bangalore North-562157.

Customer's Reference : BBMP/EE/BTP/WO/72/2018-19

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 10-09-20

Customer ID : Footing Concrete

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M20 / 28 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

Date of test : 06/10/2020

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	Footing Concrete	M20	08/09/2020	06/10/2020	151.47 X 151.22 X 150.66	22905	**8.154**	530.2	23.1	23.1
2	Footing Concrete	M20	08/09/2020	06/10/2020	151.59 X 151.31 X 150.84	22937	**8.250**	509.3	22.2	
3	Footing Concrete	M20	08/09/2020	06/10/2020	151.60 X 149.20 X 149.55	22618	**8.959**	539.6	23.9	

* The results obtained are satisfactory as per standard requirements.

Note:

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Samples will be disposed after 30 days from the date of issue of test certificate

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R RUDRAPRASAD
Authorized Signatory
Technical Manager

****End of Report****

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4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: T

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID	:	**CP-2021-01-28-81**
Customer	:	Assistant Executive Engineer, Kodigehalli Sub Division, BBMP, Bangalore.
Address	:	Kodigehalli Sub Division, BBMP, Bangalore.
Project Name	:	Package-3, Includes 4 Works. 1) Improvements to CA Sites Providing Chain Link Fencing in Coffee Board Layout and Surrounding Areas in Ward No.07, Byatarayanapura, 2) Improvements to CA Sites Providing Chain Link Fencing in Jakkur, Jakkur Layout and Surrounding Areas in Ward No.07, 3) Byatarayanapura. Improvements to Roads and Footpaths Vinayaka Layout 1st Stage, Vinayaka Layout 2nd Stage and Amruthanagara in Ward No.07, Byatarayanapura, 4) Construction and Improvements of Toilets in Sahakaranagar,Byatarayanapura Surrounding Areas in Ward No.07, Byatarayanapura.
Agency	:	Sri.B.B. Umesh, No.385/1, Near Anjeneya Temple, Bettahalasuru (P), Bangalore North-562157.
Customer's Reference	:	BBMP/EE/BTP/WO/72/2018-19
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	23-09-20
Customer ID	:	Column Concrete
Sample Type /Size	:	150X150X150 mm
Sample grade/Age	:	M20 / 7 Days Compressive Strength
Reference to BIS codes	:	IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5
Date of test	:	28/09/2020

Date: 28/09/2020

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	Column Concrete	M20	21/09/2020	28/09/2020	151.30 X 150.20 X 149.15	22726	**8.032**	423.6	18.6	18.4
2	Column Concrete	M20	21/09/2020	28/09/2020	150.72 X 151.67 X 150.70	22860	**8.429**	421.4	18.4	
3	Column Concrete	M20	21/09/2020	28/09/2020	149.44 X 150.87 X 149.25	22546	**8.955**	409.6	18.2	

* The results obtained are satisfactory as per standard requirements.

Note:

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Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

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